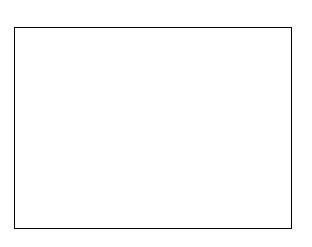
South Carolina Water Use Report 2006 Annual Summary







South Carolina Department of Health and Environmental Control





South Carolina Water Use Report 2006 Summary

South Carolina Department of Health and Environmental Control 2600 Bull Street Columbia, SC 29201

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Definitions

Aquifer – A geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs. An alternate definition includes saturated material capable of providing economically viable amounts of water to wells or springs.

Aquaculture water use (water use category) – Water used for raising, farming and/or harvesting of organisms that live in water, such as fish, shrimp and other shellfish and vegetal matter (seaweed).

Consumptive water use – The amount of water withdrawn that is evaporated, transpired, incorporated into products or crops, consumed by humans or livestock, or otherwise removed from the immediate water environment.

Effluent (wastewater) – Water conveyed out of a wastewater treatment facility or other works used for the purpose of treating, stabilizing, or holding wastewater. Effluent is often highly treated and is an excellent option for reuse of wastewater for irrigation.

Evapotranspiration – Collective term, including water discharged to the atmosphere as a result of evaporation from the soil and surface-water bodies and plant transpiration.

Fall Line – The geologic and physiographic surface boundary separating the sedimentary deposits of the Coastal Plain from the metamorphic and igneous rocks of the Piedmont.

Farm – Any operation from which \$1000.00 or more of agricultural products were sold or normally would be sold during the year.

Golf course irrigation (water use category) – Water applied to maintain golf course turf, including tee boxes, fairways, putting greens, associated practice areas and periphery aesthetic landscaping.

Groundwater – Generally, all subsurface water as distinct from surface water; specifically, that part of the subsurface water in the saturated zone.

Hydroelectric water use (water use category) – Water used in generating electricity where turbine generators are driven by falling water.

Industrial water use (water use category) – Water used for commercial and industrial purposes, including fabrication, processing, washing, in-plant conveyance and cooling.

Irrigated acreage – Acreage capable of being irrigated, with regard to availability of water, suitable soils and topography of land.

Irrigation water use (water use category) – Water that is used for agricultural and landscaping purposes including turf farming and livestock management.

Mining water use (water use category) – Water that is used for in conjunction with surface or subsurface mining of minerals or natural materials

Other use (water use category) – Any use of surface water or groundwater not specifically identified in any of the other categories.

Reclaimed water – Wastewater treatment plant effluent that has been diverted, intercepted, or otherwise conveyed for use before it reaches a natural waterway or aquifer.

Surface water – Water flowing or stored on the earth's surface such as a stream, lake, or reservoir.

Thermoelectric water use (water use category) – Water used in generating electricity from fossil fuel (coal, oil, natural gas), geothermal, biomass, solid waste, or nuclear energy.

Water supply (water use category) – Water withdrawn by public and private water suppliers and conveyed to users or groups of users. Water suppliers provide water for a variety of uses including domestic, commercial, industrial and public water use.

Water usage rates – As utilized in this report, measurements to quantitatively represent volumetric withdrawals per unit of time; as in gallons per minute (gpm), gallons per day (gpd) and gallons per year (gpy). Unless otherwise stated, figures in this report are presented in millions of gallons per year.

Water use – Generally, water that is used for a specific purpose (i.e., domestic use, industrial, etc.). Broadly, human interaction with and influence on the hydrologic cycle, and includes water withdrawal, distribution, consumptive use, wastewater collection and return flow.

Withdrawal – The removal of surface water or groundwater from its current setting in the natural hydrologic system for use, including, but not limited to, water supply, industrial use, commercial use, domestic use, irrigation, livestock, power generation

Forward

The South Carolina Department of Health and Environmental Control (DHEC) is committed to the responsible management of South Carolina's water resources by encouraging continued conservation and reasonable use to ensure a sustainable supply for present and future demands. The South Carolina *Surface Water Withdrawal and Reporting Act*, §49-4-10 et. seq., and the South Carolina *Groundwater Use and Reporting Act*, §49-5-10 et. seq., require water users that withdraw three (3) million gallons or greater in any month to register with and report that use annually to the Water Use Program at DHEC.

Water Use data is used by the State of South Carolina to better define the distribution and demand for our surface and groundwater resources across the state. Data from the Water Use Program at DHEC is shared between other local, state, and federal regulatory and scientific agencies to establish a common understanding of the demands placed upon our water resources. This common database has proven critical in water management decisions and water use conflict resolution.

Statistics utilized in this report represent data obtained from users registered with the Water Use Program. Consumptive use from private domestic wells, small surface water irrigation intakes, facilities that do not meet the reporting threshold, or data from facilities failing to report their annual water use are not included in this annual summary. For the year 2006, compliance of reporting facilities exceeded 99.9%.

If you have questions about this or previous Annual Water Use Reports, or would like to obtain further information about reported water withdrawals in South Carolina, please contact:

Water Use Program SCDHEC Bureau of Water 2600 Bull Street Columbia, SC 29201 www.scdhec.net/water

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Introduction

South Carolinians have enjoyed an available fresh water supply that is clean, abundant, and easily attainable. In South Carolina today, close to 1.2 million people rely on groundwater and 2.8 million people rely on surface water for their drinking water and other uses. According to the U.S. Census Bureau, South Carolina will increase its population by 600,000 (Appendix C) people by 2025 and the U.S. Department of Agriculture reports development converts approximately 100,000 acres per year to urban uses. This growth and development in the state has placed increasing demand on our water supplies. With limited and sporadic rainfall events, groundwater systems and surface water bodies under continuous natural discharge and, in recent years, human use (pumpage) showed steady and, at times, drastic water level declines with numerous waterways reaching record low flow conditions. Due to the low flow conditions, excursions of saltwater inland along coastal waterways threatened some surface water intakes. Some homeowners that rely on shallow water wells have been forced to drill deeper wells or seek alternate sources of water supply.

In conjunction with natural conditions, the continued impact to groundwater systems through human induced contamination (physical and chemical) or natural impact demonstrate the vulnerability of this finite resource and the continuing need to closely monitor, manage and preserve the resource in South Carolina for current and future generations. The state General Assembly declared that,

"...the groundwater resources of the State be put to beneficial use to the fullest extent to which they [are] capable and to provide and maintain conditions which are conducive to the development and use of all water resources."

Consistent and accurate data collection is requisite in establishing water use trends and implementing reasonable management strategies. Water use reporting outside of designated Capacity Use Areas has been historically voluntary. As of January 1, 2001, anyone withdrawing groundwater or surface water in excess of three (3) million gallons per month (in any month) must register and report that use annually to the South Carolina Department of Health and Environmental Control (Department). Registration and reporting is now a requirement of law and the Department has authority to take enforcement action against those not reporting.

Purpose and Methodology

The purpose of the annual *South Carolina Water Use Report* is to summarily present reported water use in South Carolina by county and use category during calendar year 2006. The Department maintains and continually updates the water use and facility databases utilized in this report. Water use data were collected by annual reporting of water use by registered users, as required and mandated by state law, and are reported in **million gallons** unless stated otherwise.

South Carolina Climate

The climate in South Carolina is affected by many factors, notably its location in the midlatitudes and its proximity to the Appalachian Mountains and the Atlantic Ocean. During the summer, ocean current-driven air masses such as the Bermuda High routinely push tropical air from the Gulf of Florida upland from the coast. These warm, moist currents collide with cooler, drier air masses to generate rainfall, and at times, severe thunderstorms. In contrast, the Appalachian region in the northwest portion of the state experiences cooler temperatures, owing in part to upward lifting of air masses and subsequent cooling effect provided by the increase in altitude. Altitude change also causes the additional phenomenon of down-slope heating as air masses from the mountains settle and compress over the eastern Blue Ridge and Piedmont region. During the winter months, the highlands of the Blue Ridge escarpment deflect northerly cold air to the southwest, often lessening the impact of major cold fronts and winter storms.

The vast majority of the state is classified as humid subtropical except in the Blue Ridge physiographic province, where it is humid continental. Average temperature varies from the mid-50s °F in the mountains to low-60s °F along the coast. The average annual precipitation is approximately 48 inches, with an annual total in the mountains of 70 to 80 inches, an annual total in the Midlands of 42 to 47 inches and an annual total along the coast of 50 to 52 inches. According to the South Carolina State Climatology Office, no month in South Carolina averages less than two inches of precipitation, regardless of location within the state. Measurable snowfall is rare, occurring one to three times a year with accumulations seldom remaining more than a day or two. Since 1900 severe droughts have occurred statewide in 1925, 1933, 1954, 1977, 1983, 1986, 1990, 1993, and most recently 1998. The latest multiyear drought was one of the most severe in South Carolina's history, with average precipitation, groundwater levels, and stream flows at or near record lows. In 2006 the average statewide temperature was 63.4°F. The average rainfall for 2006 was 45.01 inches¹.

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¹ Southeast Regional Climate Center, 1885-2006, "Monthly and Seasonal Climate Information"

South Carolina Geography and Hydrology

Geography and Physiography

South Carolina has a distinct natural beauty and an ecological diversity covering nearly 31,189 square miles, with approximately 30,111 square miles land area, 1,078 square miles inland or coastal waterways and 135 miles of coastline. The diversity we experience is resultant of climatic conditions, geology and three major physiographic regions: the Blue Ridge, the Piedmont and the Coastal Plain (**Figure 1**). The physiographic regions exhibit variations in topography, geology, hydrology and vegetation that directly affect the quantity, quality and availability of water resources in South Carolina.

Blue Ridge

The Blue Ridge physiographic province is located in the extreme northwest portion of Oconee and Pickens counties, and is distinguished from other parts of South Carolina by greater elevations (1,000 – 3,300 feet) and surface relief. Dissected mountains, rugged hills and thick forest regions characterize the land surface. Surface water in the Blue Ridge takes the form of high gradient creeks and streams and natural or man-made lakes, while groundwater occurs in the fractures of the bedrock and a thin veneer of soil and saprolite overlying the bedrock. In general, water quality of streams and groundwater is excellent in the Blue Ridge owing to the constant replenishment from abundant local rainfall.

Piedmont

The Piedmont physiographic province includes all counties, or portions of counties, northwest of and to the Fall Line, exclusive of those counties within the Blue Ridge province. Although similar to the Blue Ridge, the region demonstrates lower topographic relief, and therefore lower gradient streams, while elevations range from between 450 to 1000 feet above sea level. Counties in the Piedmont and Blue Ridge physiographic provinces depend primarily on the abundant regional rainfall that recharges lakes, reservoirs and major river systems. These surface water bodies constitute the primary source of water for public supply, industry, agriculture, and power production in the Piedmont Region. Similar to the Blue Ridge Province, groundwater occurs in the fractures of the bedrock and overlying soil and saprolite, and is also of good quality, except in locations where its chemical quality has been impacted by man.

Coastal Plain

The Coastal Plain physiographic province includes all counties, or portions of counties, extending from the Fall Line east to the Atlantic Ocean. Elevations of the exposed Coastal Plain range between 450 feet to sea level. Once below the Fall Line, rivers and streams assume a different character than those found in the Piedmont. Where streams once rolled across exposed Piedmont rocks and tumbled down the occasional stretch of whitewater, the Coastal Plain streams have a slower pace with quiet meandering river channels with adjacent wetlands common. Regional geology of the Coastal Plain is characterized by aquifers developed in layers of sands, silts, or high-permeability limestone confined by units of clay and silts or low-permeability limestone. The vast majority of South Carolina's water resources are contained as groundwater in the Coastal Plain, and in general, reliance on groundwater for irrigation, industrial uses, and public water supply increases dramatically east of the Fall Line (**Figure 7**). A generalized cross-section for the Coastal Plain aquifers is presented as **Figure 2**, and a brief outline of the major aquifers in South Carolina follows.

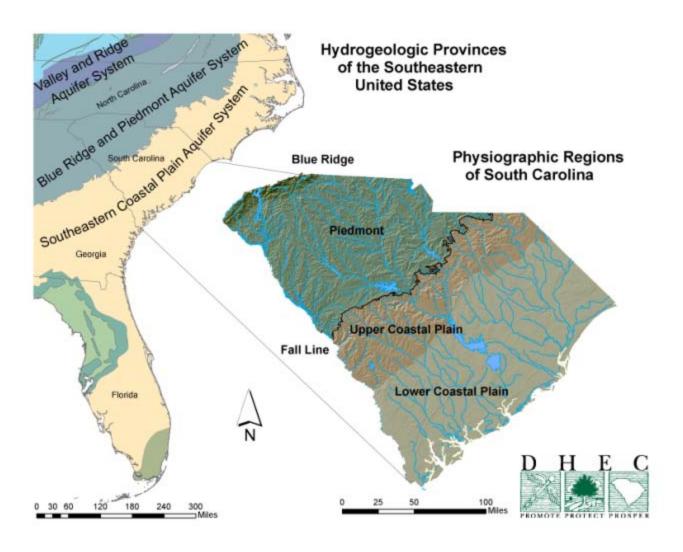


Figure 1: Hydrogeologic and Physiographic Setting for Water Use in South Carolina

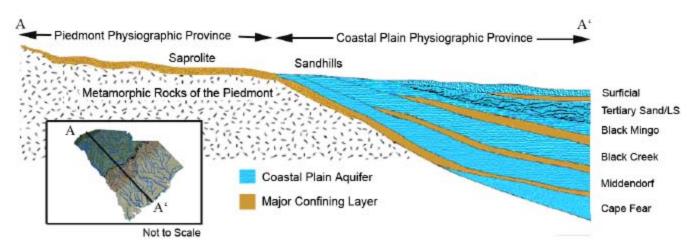


Figure 2: Generalized Hydrogeologic Cross-Section from the Blue Ridge through the Lower Coastal Plain in South Carolina

Groundwater Resources

Groundwater resources are found throughout the subsurface of South Carolina in varying quantities, qualities, and depths that reflect the nature of the geologic materials that host the respective aquifers. The following is a brief description of the State's major groundwater resources.

Crystalline Rock Aquifer System of the Blue Ridge and Piedmont

Geology of the Blue Ridge is typically characterized by clayey saprolite, ranging in depth from several feet to tens of feet, overlying metamorphic crystalline rock. The saprolite grades downward through a highly permeable transition zone to unaltered parent bedrock. Groundwater conditions of the bedrock are dependent on the number of fractures and degree of interconnection of the fracture systems. Groundwater moves slowly through the saprolite and discharges to surface water bodies, wells, or is released from storage to the underlying bedrock through fractures. Geology of the Piedmont is similar to that of the Blue Ridge, but the diminished relief allows for greater thickness of saprolite development. In general, wells in the Blue Ridge and Piedmont regions yield little water when compared to wells drilled in the Coastal Plain owing to the inherently low porosity and permeability of the crystalline rock present in the upstate.

Surficial Aquifer System

Shallow sands that comprise the Surficial aquifer are among the youngest of the Coastal Plain sediments and are found exclusively in the Lower Coastal Plain (**Figure 1**). This system is capable of producing water in modest amounts for irrigation and private drinking water supply, but is susceptible to contamination due to its shallow, unconfined nature. The Surficial sands are highly influenced by local precipitation and river stage and are prone to dramatic water level declines during times of drought.

Tertiary Limestone/Sand Aquifer System (Floridan Aquifer System)

In the southern half of the Coastal Plain, Tertiary aquifers consisting of sand grade southeastward into an ever thickening wedge of limestone. Development of the aquifer system is common in the Charleston, Dorchester, and Berkeley County area. Southwest of the Combahee and Salkehatchie Rivers, upper sections of the limestone become increasingly permeable owing to abundant voids created from dissolved marine fossils, and are capable of storing and supplying tremendous amounts of water. The majority of utilization of the aquifer occurs near the upper, highly permeable zone that supplies the majority of residential wells in Beaufort and Jasper Counties, and is the primary source of water for public supply, irrigation, and industry in the Low Country. This southern section of the Tertiary Limestone correlates regionally with the Upper Floridan Aquifer that extends from southern South Carolina to the southern keys of Florida.

Black Mingo Aquifer

Development of the Black Mingo is common in the vicinity of Charleston, Dorchester, and Berkeley counties, but has been largely overlooked south of Dorchester County owing to the increasingly prolific nature of the more shallow Tertiary Limestone (Floridan Aquifer System). Like the majority of Coastal Plain sediments, the nature of the aquifer differs dramatically from one area to the next. In the Charleston area, the aquifer is composed of permeable sand and limestone, while within the Upper Coastal Plain the Black Mingo is often a poorly producing aquifer composed of fine silt and clay, and therefore is unused in favor of the Middendorf or Tertiary Sand Aquifer.

Pee Dee Aquifer

The Pee Dee aquifer, where present, generally produces quality water at moderate rates. The aquifer matrix is composed of sand and silt separated by discontinuous intervals of clay. Development of the Pee Dee aquifer usually takes place in conjunction with the more prolific Black Creek aquifer and has become an excellent alternative to the often-overburdened Black

Creek for many uses, especially irrigation. The Pee Dee aquifer is most utilized in the northeast portion of the State, with the most demand centered between Florence and Horry Counties.

Black Creek Aquifer

Though present throughout much of the Coastal Plain, development of the Black Creek aquifer has been conducted primarily in the mid-to-northern portions of the Coastal Plain. The aquifer is composed of silt and fine sand with coarse sand in the Upper Coastal Plain. The Black Creek aquifer is an important source of water for public supply, irrigation, and industry from Marion County southeast to Georgetown County.

Middendorf Aquifer

The Middendorf Aquifer is a prolific source of water throughout the majority of the coastal plain and consists of coarse-grained fluvial sands near the Fall Line that grade to fine-grained marine sands and clay in the northern and eastern Lower Coastal Plain. The majority of the Pee Dee region, including Chesterfield, Darlington, Florence, and Marlboro Counties, as well as Orangeburg and Sumter Counties rely heavily on the Middendorf for irrigation, public supply, and industrial use. In the past decade, use of the Middendorf has increased along the southern coast in areas such as Charleston County.

Cape Fear Aquifer

Little information exists from this deep sand aquifer owing to the few wells that have penetrated the formation. In general, water quality from the Cape Fear aquifer is poor over much of its extent owing to ancient, unflushed seawater and extensive mineralization. In South Carolina, the Cape Fear aquifer is largely unused.

Surface Water Resources

South Carolina's land surface is drained by eight (8) major river basins, all of which are critical to public water supply, irrigation, industry, and/or power generation. These major watersheds are shown as **Figure 3**, and a brief description of each major watershed follows.

Broad River Basin

The Broad River Watershed encompasses portions of North and South Carolina and drains the majority of Cherokee, Union, Spartanburg, and Greenville Counties. Portions of Chester, Fairfield, Richland and York counties are also included in the basin, and are drained by the Enoree, Pacolet, and Tyger Rivers, major tributary streams to the Broad River.

Catawba River Basin

Similar to the Broad River Basin, the watershed of the Catawba River drains counties in North and South Carolina east of a hydrologic divide in York, Chester, and Fairfield Counties. All or portions of the following counties lie within the basin: Chester, Fairfield, Kershaw, Lancaster, Richland, Sumter and York. The Catawba basin hosts Lake Wylie, Fishing Creek Reservoir, Lake Wateree, the Catawba and Wateree Rivers and associated tributary streams.

Edisto River Basin

The Edisto River Basin encompasses nearly all of Orangeburg County and portions of Aiken, Berkeley, Calhoun, Dorchester, and Lexington counties. The basin drains the central Coastal Plain and contains the North and South Forks of the Edisto River and tributaries, as well as numerous ecologically important wetland areas.

Pee Dee River Basin

The Pee Dee River Basin is the largest of South Carolina's watersheds and drains all or portions of Chesterfield, Darlington, Dillon, Georgetown, Horry, Kershaw, Lancaster, Lee, Marion, Marlboro, Williamsburg counties, and portions of southeastern North Carolina. The

Greater Pee Dee Watershed encompasses 5.1 million acres and includes the Pee Dee, Lynches, Waccamaw, and Sampit watersheds, as well as the Intracoastal Waterway and Winyah Bay.

Salkehatchie River Basin

The Salkehatchie basin is located entirely in the Coastal Plain and drains portions of Bamberg, Barnwell, Beaufort, Colleton, Hampton, and Jasper counties. The Coosawhatchie, Salkehatchie and Little Salkehatchie Rivers, along with their associated tributaries and local wetlands drain the basin and form tide-dominated distributary channels near the coast.

Saluda River Basin

The Saluda River Basin drains the central portion of South Carolina's Piedmont Region and encompasses major portions of Greenville and Pickens counties, as well as portions of Abbeville, Greenwood, Laurens, Lexington, Richland, and Saluda Counties. The basin includes all tributary streams to the Saluda River and Lakes Greenwood and Murray, the latter being a critical source for public water supply and hydroelectric power in central South Carolina.

Santee River Basin

The Santee River basin originates near the confluence of the Catawba and Broad River Basins and includes two of the State's largest reservoirs, Lake Marion and Lake Moultrie. These two major surface water resources are important power generating assets for the South Carolina. The basin drains Berkeley, Calhoun, Charleston, Clarendon, Dorchester, and small portions of Georgetown and Sumter Counties via tributaries of the Cooper, Santee and Ashley Rivers.

Savannah River Basin

The Savannah River Basin stretches from the Blue Ridge to the Atlantic Ocean and encompasses the border counties of South Carolina. The watershed drains major portions of Abbeville, Aiken, Allendale, Anderson, Edgefield, Greenwood, Hapton, McCormick, Oconee, and Pickens County, as well as adjacent counties in Georgia. The watershed includes the Savannah, Chatooga, Seneca, Little River, Stevens Creek, Rocky, and Tugaloo Rivers, and discharges approximately 8.0 billion gallons per day.



Figure 3: Major River Basins of South Carolina

Demographics

According to the 2000 Census, South Carolina's estimated population is 4,012,012. Approximately 54.6% of the population resides in an urban setting and approximately 45.4% reside in rural communities (**Figure 4**). South Carolina has approximately 25,000 farms, occupying 4,846,000 acres (7,572 square miles). Of this, approximately 2,270,000 acres (3,547 square miles) are cropland². Major manufacturing industries are located along the I-26/I-85 corridor, specifically in the Greenville-Spartanburg Metropolitan Statistical Area (MSA), Columbia MSA, Charlotte-Gastonia-Rock Hill MSA and the Charleston MSA. Other manufacturing concentrations are located in the Augusta-Aiken MSA, and the Florence area³. South Carolina is served by 47 electric utilities and nine (9) generating utility companies with 51 power plants (206 generators) with a total rating capacity of 18,827.4 megawatts. Power production in the State (2005) totaled 94,363 million kilowatt hours⁴.

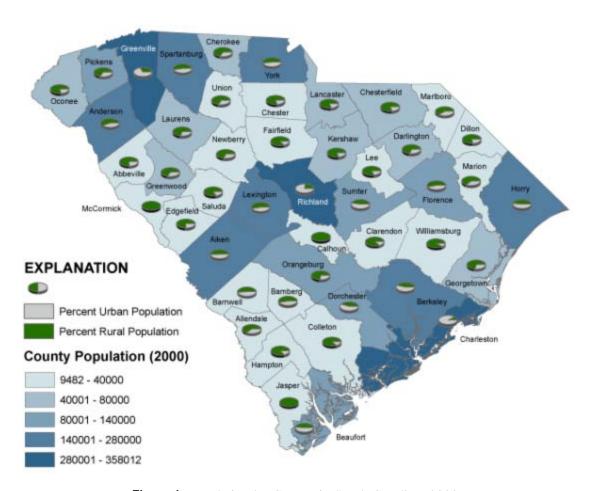


Figure 4: Population by County in South Carolina, 2000

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 $^{^2}$ 2002 Census of Agriculture, Volume 1 Geographic Area Series, Historical Highlights: "Table 1: 2002 and Earlier Census Years"

³ S.C. Department of Commerce, 2000/2001 "South Carolina Industrial Directory."

⁴ S.C. Budget and Control Board Statistical Abstract 2004

2006 Water Use Profile

Surface and Groundwater Use Summary by Category and County in South Carolina, 2006

The following section outlines all reported water use for the State of South Carolina for the calendar year 2006. Water use is summarized by category, (Appendix A)and further tabulated on a county-by-county basis (Appendix B). Where appropriate, the spatial distribution of the magnitude of water use is demonstrated on an accompanying map with a breakdown chart of groundwater and surface water use as a percentage of total use for the category.

Reporting Water Withdrawers

For the reporting year 2006, South Carolina had registered 849 water withdrawers with 2492 sources, 468 surface water facilities with 685 sources and 536 groundwater facilities with 1807 sources.

Water Use Category	Facilities	GW Source	SW Source
Golf Course	243	250	266
Water Supply	224	778	76
Irrigation	216	489	229
Industrial	94	226	51
Hydroelectric	31	1	32
Thermoelectric	19	16	22
Mining	11	10	4
Aquaculture	7	11	5
Other	4	26	0
Total	849	1,807	685

Total Reported Water Use

Total water use reported for 2006 was more than 16.4 trillion gallons from 849 reporting facilities. Surface water withdrawal from 468 facilities accounted for approximately 16.3 trillion gallons, approximately 99.3% of total water use. Groundwater withdrawal from 536 reporting facilities accounted for approximately 81.5 billion gallons or approximately 0.7%.

Water Use Category	Groundwater	Surface Water	Total	Percentage
Aquaculture	148.13	171.87	320.00	0.0020%
Golf Courses	3,371.75	9,275.15	12,646.90.	0.0771%
Industrial	11,137.61	138,188.07	149,325.68	0.9105%
Irrigation	17,980.52	11,176.64	29,157.46	0.1777%
Mining	3,225.35	498.44	3,723.79	0.0227%
Other	54.01	NR	54.01	0.0003%
Hydroelectric	0.88	12,408,954	12,408,954.88	75.6679%
Thermoelectric	6,261.24	3,563,955.928	3,570,217.168	21.7696%
Water Supply	39,271.52	186,149.202	225,420.72	1.3745%

Water Use	2001	2002	2003	2004	2005	2006
Hydroelectric	9,796,267.91	11,415,081.44	18,958,207.77	15,203,000.52	15,766,867.08	12,408,954.88
Thermoelectric	1,624,984.88	2,467,042.32	3,558,474.88	3,232,104.071	4,256,504.44	3,570,217.168
Water Supply	193,525.29	212,402.79	197,088.27	209,464.303	215,771.05	225,420.72
Industrial	180,579.90	167,051.34	168,334.76	157,309.024	152,086.80	138,188.07
Irrigation	27,121.14	29,668.39	12,172.86	24,119.869	21,924.04	29,157.46
Golf Course	13,302.54	14,022.92	10,373.47	13,230.462	11,908.10	12,646.90
Mining	2,691.75	3,159.88	4,935.07	3,241.623	3,305.18	3,723.79
Aquaculture	865.17	2,283.95	1,451.98	1,355.631	410.31	320.00
Other	204.84	106.22	59.033	85.505	105.63	54.01
Total	11,839,543.4	14,310,819.25	22,911,098.09	18,843,911.00	20,428,882.61	16,400,793.21
Facilities	931	848	833	848	862	849

Water Use in Power Production

According to the 2001 Energy Use Profile, South Carolina has 9 power generating utility companies with 51 power plants containing 206 generators with a total rating capacity of 18,827.4 megawatts (2000). The type generators are as follows:

- 96- Hydraulic Turbine (conventional)
- 54- Gas Combustion Turbine
- 37- Steam Turbine (boiler)
- 16- Hydraulic Turbine (pump storage)
- 3- Internal Combustion (diesel)

The primary energy source for the generators is as follows:

- 112- Water
- 32- Diesel Fuel Oil
- 28- Coal
- 25- Natural Gas
- 7- Nuclear
- 2- Residual Fuel Oil

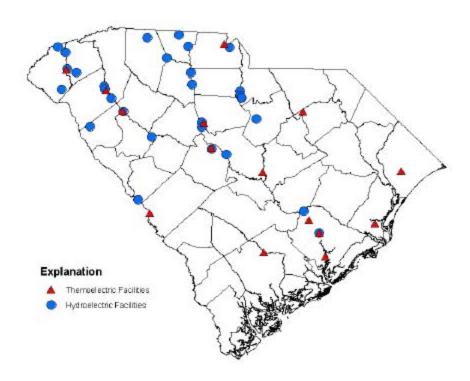
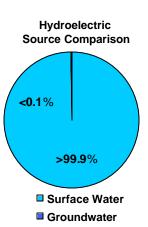


Figure 5: Distribution of Hydroelectric and Thermoelectric Facilities in South Carolina

Hydroelectric Water Use

Hydroelectric facilities employ energy from flowing water to generate electricity. Hydroelectric facilities utilize *impoundments* (reservoirs), *diversion* (run-of river), *or pumped storage* (reversible turbines). Water use is typically non-consumptive flow-through, with temporary diversion from down stream users. Reported water use for 32 hydroelectric sources accounted for approximately 12.409 trillion gallons, approximately 76% of reported water use for power production.

County	Surface Water	Groundwater	County Total
Abbeville	15,807	NR	15,807
Anderson	118000	NR	118000
Berkeley	1,131,435.6	0.9	1,131,436.5
Cherokee	246,549	NR	246,549
Chester	1,617,728	NR	1,617,728
Edgefield	939,325.5	NR	939,325.5
Fairfield	2,518,500.1	NR	2,518,500.1
Greenville	92,268	NR	92,268
Greenwood	93,433	NR	93,433
Kershaw	923,086	NR	923,086
Lancaster	859,455	NR	859,455
Laurens	0	NR	0
Lexington	149,243.6	NR	149,243.6
Oconee	9,800	NR	9,800
Pickens	2,324,587	NR	2,324,587
Richland	350,770.5	NR	350,770.5
Spartanburg	11,852.3	NR	11,852.3
Union	327,175.2	NR	327,175.2
York	679,938	NR	679,938



NR = None Reported

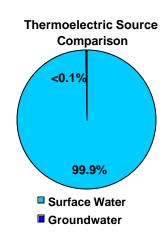
	Surface Water	Groundwater
Source Total:	12,408,954	0.9

Total Hydro Power	12,408,954.9
Use (million gallons):	

Thermoelectric Water Use

Thermoelectric facilities generate electricity by superheating water to steam then passing the steam under pressure to turbines. Boilers are fired by coal, nuclear power or residual fuel oil. Large volumes of cooling water are required to condense the steam to the liquid state. Reported water use for 19 thermoelectric sources accounted for more than 4.254 trillion gallons, approximately 22% of total reported water use for the year.

County	Surface Water	Groundwater	County Total
Aiken	56,012.00	NR	56,012.00
Anderson	32,090.71	NR	32,090.71
Berkeley	188,139.56	10.85	188,150.41
Cherokee	NR	00	0
Colleton	2,313.26	0.69	2,313.95
Darlington	296,062.00	362.54	296,424.54
Fairfield	271,236.32	NR	271,236.32
Georgetown	4,715.25	NR	4,715.25
Greenwood	56,000.00	NR	56,000.00
Horry	44,499.40	NR	44,499.40
Lexington	50,963.92	NR	50,963.92
Oconee	2,332,136.00	NR	2,332,136.00
Orangeburg	00	5887.16	5887.16
Richland	146,348.50	NR	146,348.50
York	83,439.00	NR	83,439.00



NR = None Reported

	Surface Water	Groundwater
Source Total:	3,563,955.92	6,261.24

Total Thermoelectric

3,570,217.16

Use (million gallons):

Total Reported Water Use

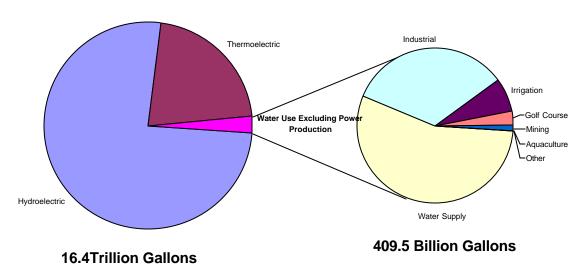


Figure 6: Reported Water Use by Category in South Carolina, 2006

Reported Water Use Excluding Power Production

During 2006, reported water use (excluding power production) totaled more than 409.5 billion gallons with surface water withdrawal accounting for 335.4 billion gallons or approximately 82.7%, and groundwater withdrawal accounting for 70.1 billion gallons or approximately 17.3%. Non-power production-oriented water use accounted for 1.9% of all reported water use in 2005.

	Groundwater	Surface Water	Total	Percentage of Total Non-Power Use
Aquaculture	148.13	171.87	320.00	.07%
Golf Courses	3371.75	9,275.15	12,646.90	3.09%
Industrial	11,137.61	138,188.07	149,325.68	36.46%
Irrigation	17,980.52	11,176.64	29,157.16	7.11%
Mining	3,225.35	498.44	3,723.79	0.91%
Other	54.01	NR	54.01	0.01%
Water Supply	39,271.52	186,149.20	225,420.72	55.05%

Total Non-Power Water Use 409,510.95 million gallons
--

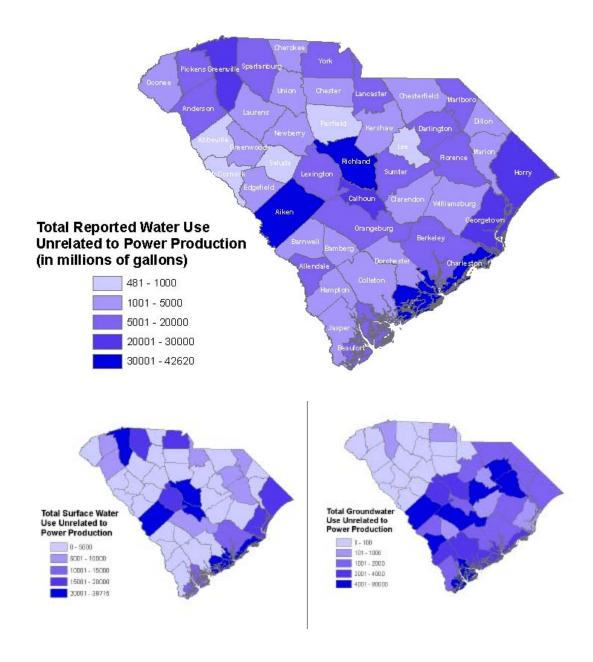


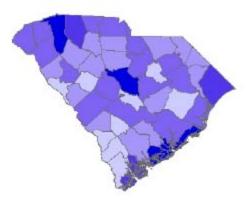
Figure 7: Distribution of Reported Water Usage Unrelated to Power Production, 2006. Figures in millions of gallons per year.

Water Supply

Water withdrawal for public water supply from 224 reporting suppliers totaled 226.3 billion gallons, with 76 surface water sources accounting for 186.15 billion gallons and 778 groundwater sources accounting for 39.27 billion gallons.

County	Groundwater	Surface Water	County Total
Abbeville	3.187	969.912	973.099
Aiken	4959.595	2374.26	7333.855
Allendale	441.754	NR	441.754
Anderson	NR	7906.997	7906.997
Bamberg	515.041	NR	515.041
Barnwell	763.273	NR	763.273
Beaufort	4346.911	8072.238	12419.15
Berkeley	186.958	5658.4	5845.358
Calhoun	256.747	NR	256.747
Charleston	2121.047	30247.328	32368.38
Cherokee	NR	2581.6	2581.6
Chester	NR	1088.79	1088.79
Chesterfield	956.312	737.295	1693.607
Clarendon	738.631	NR	738.631
Colleton	746.51	NR	746.51
Darlington	2392.724	NR	2392.724
Dillon	1570.631	NR	1570.631
Dorchester	705.715	NR	705.715
Edgefield	NR	1652.454	1652.454
Fairfield	71.9	722.306	794.206
Florence	4432.022	1343.48	5775.502
Georgetown	724.405	2320.782	3045.187
Greenville	27.765	25194.5	25222.27
Greenwood	5.362	4238.023	4243.385
Hampton	519.285	NR	519.285
Horry	854.291	15868.7	16722.99
Jasper	362.795	NR	362.795
Kershaw	544.458	1835.431	2379.889
Lancaster	NR	7964.4	7964.4
Laurens	NR	1748.686	1748.686
Lee	609.7	NR	609.7
Lexington	441.274	5640.81	6082.084
Marion	1295.523	NR	1295.523
Marlboro	1163.126	392.75	1555.876
McCormick	NR	445.135	445.135
Newberry	19.697	1903.844	1923.541
Oconee	43.841	3887.078	3930.919
Orangeburg	660.226	3484.8	4145.026
Pickens	NR	3998.539	3998.539
Richland	331.511	22910.18	23241.69
Saluda	13.395	NR	13.395
Spartanburg	25.502	14725.447	14750.95
Sumter	5775.757	NR	5775.757
Union	NR	1259.814	1259.814
Williamsburg	556.959	NR	556.959
York	90.874	5945.135	6036.009
· = = = = = = = = = = = = = = = =			= None Reported

Water Supply Use Source Comparison
82.7%
■ Groundwater ■ Surface Water



Distribution of reported water supply water use in South Carolina, 2006. Darker shades indicate the highest use areas.

	Groundwater	Surface Water
Source Total:	39,274.704	187,119.114

Total Water Supply Use (millions of gallons): 226,393.8

Industrial Use

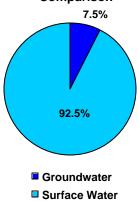
Water withdrawal for industrial use from 94 reporting industries totaled 149.3 billion gallons, with 51 surface water sources accounting for 138.188 billion gallons and 226 groundwater sources accounting for 11.137 billion gallons. Water use at industrial facilities is predominantly cooling water (contact and non-contact) with return to surface water systems through permitted NPDES discharges.

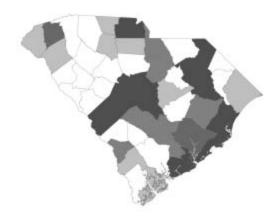
County	Groundwater	Surface Water	County Total
Abbeville	NR	NR	NR
Aiken	1110.989	22232.029	23343.02
Allendale	850.02	NR	850.02
Anderson	NR	73.171	73.171
Bamberg	NR	NR	NR
Barnwell	158.331	NR	158.331
Beaufort	92.198	NR	92.198
Berkeley	1293.15	3682.251	4975.401
Calhoun	133	28262.149	28395.15
Charleston	43.057	9168.09	9211.147
Cherokee	NR	620.524	620.524
Chester	1.484	99.643	101.127
Chesterfield	NR	NR	NR
Clarendon	NR	NR	NR
Colleton	NR	NR	NR
Darlington	1521.046	7190.234	8711.28
Dillon	NR	NR	NR
Dorchester	458.114	0	458.114
Edgefield	NR	NR	NR
Fairfield	NR	NR	NR
Florence	763.328	7988.89	8752.218
Georgetown	99.04	12574.901	12673.94
Greenville	68.706	NR	68.706
Greenwood	9.16	36.9	46.06
Hampton	311.2	NR	311.2
Horry	179.053	8.23	187.283
Jasper	NR	NR	NR
Kershaw	517.349	824.944	1342.293
Lancaster	NR	1756	1756
Laurens	NR	NR	NR
Lee	NR	NR	NR
Lexington	455.825	9482.331	9938.156
Marion	NR	NR	NR
Marlboro	282.297	7176.483	7458.78
McCormick	NR	NR	NR
Newberry	NR	NR	NR
Oconee	NR	510.168	510.168
Orangeburg	1130.881	166.994	1297.875
Pickens	! !	2526.624	2526.624
Richland	701.29	10597.317	11298.61
Saluda	NR	NR	NR
Spartanburg	13.991	NR	13.991
Sumter	272.491	NR	272.491
Union	2.659	458	460.659
Williamsburg	665.904	NR	665.904
York	3.042	12752.2	12755.24
		NR	= None Reported

	Groundwater	Surface Water
Source Total:	11137.61	138188.07

Total Industrial Use (millions of gallons): 149325.7

Industrial Use Source Comparison



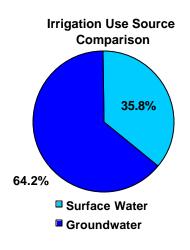


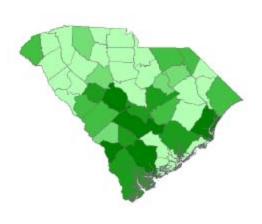
Distribution of reported Industrial water use in South Carolina, 2006. Darker shades indicate the highest use areas.

Irrigation Use

Water withdrawal for irrigation use from 216 reporting entities totaled 29.157 billion gallons, with 229 surface water sources accounting for 11.176 billion gallons and 489 groundwater sources accounting for 17.980 billion gallons.

County	Groundwater	Surface Water	County Total
Abbeville	NR	NR	NR
Aiken	233.657	4.105	237.762
Allendale	3390.417	617.29	4007.707
Anderson	NR	NR	NR
Bamberg	378.347	403.964	782.311
Barnwell	82.165	31.2	113.365
Beaufort	690.524	25.905	716.429
Berkeley	0.24	1051.6	1051.84
Calhoun	987.504	72.339	1059.843
Charleston	8.885	19.266	28.151
Cherokee	NR	NR	NR
Chester	NR	NR	NR
Chesterfield	350.975	6.039	357.014
Clarendon	175.823	50.705	226.528
Colleton	1900.5	790	2690.5
Darlington	35.378	127.587	162.965
Dillon	36.4	NR	36.4
Dorchester	NR	NR	NR
Edgefield	NR 0	289.55	289.55
Fairfield	NR	NR	NR
Florence	63.303	0	63.303
Georgetown	23.568	3608.627	3632.195
Greenville	0.2	30.82	31.02
Greenwood	1.2		1.2
Hampton	1586.599	34.5	1621.099
Horry	200.354	67.554	267.908
Jasper	660.825	0	660.825
Kershaw	NR	NR	NR
Lancaster	NR	NR	NR
Laurens	NR	NR	NR
Lee	126.067	7.28	133.347
Lexington	1864.216	530.749	2394.965
Marion	24.39	5	29.39
Marlboro	191.407	87.993	279.4
McCormick	NR	NR	NR
Newberry	47.89	135.316	183.206
Oconee	i	279.76	279.76
Orangeburg	3498.51	1634.881	5133.391
Pickens	NR	NR	NR ,
Richland	33.304	0.8	34.104
Saluda	NR	599.8	599.8
Spartanburg	NR	107.66	107.66
Sumter	1387.87	553.682	1941.552
Union	NR	NR	NR
Williamsburg	NR	NR	NR
York	NR	2.67	2.67
		NR	= None Reported





Distribution of reported irrigation water use in South Carolina, 2006. Darker shades indicate the highest use areas.

	Groundwater	Surface Water
Source Total:	17980.52	11176.64

Total Irrigation Use (millions of gallons):

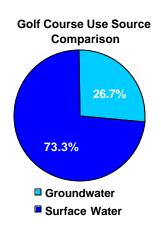
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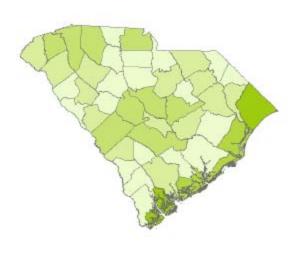
Golf Course Use

Water withdrawal from 243 reporting courses for golf course irrigation totaled 12.646 billion gallons, with 266 surface water sources accounting for 9.275 billion gallons and 250 groundwater sources accounting for 3.371 billion gallons.

County	Groundwater	Surface Water	County Total
Abbeville	NR	NR	NR 0
Aiken	15.33	225.686	241.016
Allendale	NR	NR	NR 0
Anderson	NR	138.09	138.09
Bamberg	NR	NR	NR 0
Barnwell	NR	62.75	62.75
Beaufort	1228.673	1969.695	3198.368
Berkeley	13	13	26
Calhoun	27.5	33.1	60.6
Charleston	732.025	279.807	1011.832
Cherokee	NR	NR	NR
Chester	31.9	11.5	43.4
Chesterfield	,	82.781	82.781
Clarendon	4.6	52.42	57.02
Colleton	63.577	1.264	64.841
Darlington	22.1	118.5	140.6
Dillon	NR	NR	NR
Dorchester	29	NR	29
Edgefield	99.75	37.5	137.25
Fairfield	NR	NR	NR
Florence	116.255	36.822	153.077
Georgetown	i	1082.865	1082.865
Greenville	11.788	194.243	206.031
Greenwood	0.186	58.465	58.651
Hampton	45.43	NR	45.43
Horry	568.317	2733.038	3301.355
Jasper	14.2	NR	14.2
Kershaw	36.626	56.4	93.026
Lancaster	13.1	3.67	16.77
Laurens	NR	48.57	48.57
Lee	NR	NR	NR
Lexington	25.68	167.116	192.796
Marion	NR	48.546	48.546
Marlboro	NR	NR	NR
McCormick	NR	36.351	36.351
Newberry	NR	0.084	0.084
Oconee	NR	114.565	114.565
Orangeburg	64.383	147.198	211.581
Pickens	NR	317.592	317.592
Richland	32.357	374.326	406.683
Saluda	NR	NR	NR
Spartanburg	11.105	416.197	427.302
Sumter	98.78	252.228	351.008
Union	NR	7.2	7.2
Williamsburg	NR	NR	NR
York	66.09	153.576	219.666
		NR	= None Reported

Source Total:	3371.752	9275.145
		0075 445
	Groundwater	Surface Water
		NR
York	66.09	153.576
Williamsburg	NR	NR
Cinon	NR	7.2
Union	·	



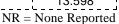


Distribution of reported golf course water use in South Carolina, 2005. Darker shades indicate the highest use areas.

Mining Use

Water withdrawal associated with mining activities at 11 reporting facilities totaled 3.305 billion gallons, with 4 surface water sources accounting for 498 million gallons and 10 groundwater sources accounting for 3.225 billion gallons.

County	Groundwater	Surface Water	County Total
Berkeley	3.372	NR ¦	3.372
Chesterfield	16.77	NR	16.77
Colleton	NR	3.136	3.136
Horry	NR	103.6	103.6
Lexington	318.48	391.707	710.186
Orangeburg	1891.2	NR	1891.168
Richland	981.96	NR	981.96
York	13.598	NR	13.598



Mining Use Source Comparison
13.4%
86.6%
☐ Groundwater ☐ Surface Water

	Groundwater	Surface Water
Source Total:	3225.347	498.443

Total Irrigation Use

(million gallons): 3723.79

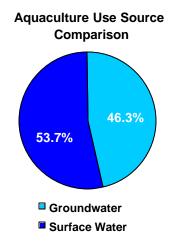
Aquaculture Use

Water withdrawal from 7 reporting aquaculture-farming facilities totaled 320 Million gallons, with 5 surface water sources accounting for 171.872 million gallons and 11 groundwater sources accounting for 148.129 million gallons.

County	Groundwater	Surface Water	County Total
Beaufort	12.442	47.491	59.933
Berkeley	4.187	67.541	71.728
Dillon	33	NR	33
Hampton	83	NR	83
Richland	15.5	21.8	37.3
Spartanburg	NR	35.04	35.04
		ND	N D . 1

	Groundwater	Surface Water
Source		
Total:	148.129	171.872

Total Aquaculture Use	
(million gallons):	320.001



Other Use

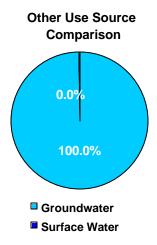
Water withdrawal for other, non-specific use from 4 reporting facilities totaled 105.634 million gallons, with groundwater accounting for all reported use.

	County	Groundwater	Surface Water	County Total
1	Beaufort	32.53	NR	32.53
į	Darlington	0	NR	0
į	Dorchester	0.11	NR	0.11
	Horry	21.368	NR	21.368

NR = None Reported

unawater	Surface Water
54.008	NR

Total Other Use 54.008 (million gallons):



Appendix A: Surface and Groundwater Use Summary Tables

Surface Water Use Summary Table (Figures in Millions of Gallons)

County	County Total	Hydroelectric	Thermoelectric	Aquaculture	Golf Course	Industry	Irrigation	Mining	Water Supply
Abbeville	16776.912	15807		1	1			1	969.912
Aiken	80848.08	ý i i i i j	80848.08	j	225.686	22232.029	4.105	ŗ	2374.26
Allendale	617.29	; j		j	j i	_ =====================================	617.29	<u></u> -	
Anderson	158208.972	118000	276209		138.09	73.171	1 _ 017.27 _		7906.997
'	!	116000	270209		1 - 136.09	/3.1/1	102.064		1 7900.997
Bamberg	403.964	!			{ <u>-</u>		403.964		
Barnwell	93.95	i		i <u></u>	62.75		31.2	<u> </u>	<u> </u>
Beaufort	10115.329	, , , , , , , , , , , , , , , , , , , ,		47.491	1969.695	L	25.905	<u> </u>	8072.238
Berkeley	1330047.91	1131435.56	2461483	67.541	13	3682.251	1051.6	 	5658.4
Calhoun	28367.588	! 		<u> </u>	33.1	28262.149	72.339		
Charleston	39714.491	į		į	279.807	9168.09	19.266	į	30247.328
Cherokee	249751.124	246549		7	;;	620.524	;		2581.6
Chester	1618927.933	1617728		1	11.5	99.643	!		1088.79
Chesterfield	826.115	T 7		7	82.781		6.039		737.295
Clarendon	103.125	Ýi		i	52.42		50.705	<u></u>	
Colleton	3107.664	;·ή	3107.664	i	1.264		790	3.136	;i
	303498.321	¦			-, :	7100 224	:	3.130	
Darlington	:	¦	303498.3		118.5	7190.234	127.587		
Dorchester	0	ļ J			0	0			
Edgefield	941305.024	939325.52		ــــــــــــــــــــــــــــــــــــــ	37.5	L	289.55	<u>.</u>	1652.454
Fairfield	2790458.748	2518500.12	5308959	<u> </u>	<u>'</u>	 -	! !	<u> </u>	722.306
Florence	9369.192	 		1	36.822	7988.89	0	 	1343.48
Georgetown	24302.422	! !	24302.42	!	1082.865	12574.901	3608.627	[2320.782
Greenville	117687.563	92268		7	194.243		30.82		25194.5
Greenwood	153766.388	93433	247199.4	1	58.465	36.9	1		4238.023
Hampton	34.5	+		1		 '	34.5	F	H 1
Horry	63280.522		63280.52	7	2733.038	8.23	67.554	103.6	15868.7
Jasper	0	Ýj		i	1		0		[
Kershaw	925802.775	022086		i	56.1	824.944	¦≚	 -	1835.431
:	869179.07	923086 859455			56.4		{		7964.4
Lancaster	'	:			3.67	1756	{		
Laurens	1797.256	0			48.57		\ <u>-</u>		1748.686
Lee	7.28	i i		<u> </u>	įj		7.28	<u></u>	<u>ļ</u> j
Lexington	216420.233	149243.6	365663.8	<u>'</u>	167.116	9482.331	530.749	391.707	5640.81
Marion	53.546	 L J		 	48.546	 -	<u> </u>	 	
Marlboro	7657.226					7176.483	87.993		392.75
McCormick	481.486	į		į	36.351		į	į	445.135
Newberry	2039.244	,		7	0.084		135.316		1903.844
Oconee	2346727.571	9800	2356528	1	114.565	510.168	279.76		3887.078
Orangeburg	5433.873	T 7	5433.873	7	147.198	166.994	1634.881		3484.8
Pickens	2331429.755	2324587		i	317.592	2526.624	0	<u></u>	3998.539
Richland	531023.413	Y	881793.9	21.8	374.326		0.8	 -	22910.18
		350770.49	001793.9	1 21.6	1 374.320	10597.317	:		22910.16
Saluda	599.8	11052.20		1 25.04	1 416 107		599.8		14705 447
Spartanburg	27136.634	11852.29		35.04	416.197		107.66		14725.447
Sumter	805.91	, , ,		į	252.228	- 	553.682	<u></u>	Ļ/
Union	328900.242	327175.228		1	7.2	458	, ,	 	1259.814
Williamsburg	0	 		 	 	 	0	 	
York	782230.581	679938	1462169		153.576	12752.2	2.67		5945.135
Grand Total:	16319339.02	12408953.8	13840475	171.87	9275.145	138188.07	11176.64	498.443	187119.11

Groundwater Use Summary Table (Figures in Millions of Gallons)

County	County Total	Hydroelectric	Thermoelectric	Aquaculture	Golf Course	Industry	Irrigation	Mining	Other	Water Supply
Abbeville	3.187	 		 	!				! !	3.187
Aiken	6319.571	 	î !	,	15.33	1110.989	233.657	0	i i	4959.595
Allendale	4682.191	r	γ	,	,	850.02	3390.417		,	441.754
Bamberg	893.388	г · !	,	,	,		378.347		, !	515.041
Barnwell	1003.769	 	+	 		158.331	82.165			763.273
Beaufort	6403.278		^	12.442	1228.673	92.198	690.524		32.53	4346.911
Berkeley	1512.645	0.884	10.854	4.187	13	1293.15	0.24	3.372	}	186.958
Calhoun	1404.751	 !		,	27.5	133	987.504		!	256.747
Charleston	2905.014	 ! !	+		732.025	43.057	8.885		!	2121.047
Cherokee	0	L 	. 0	'	/		,		,	
Chester	33.384	; 	;	 	31.9	1.484	 		;	-i
Chesterfield	1324.057	г · I	,	1 I	,	,	350.975	16.77	,	956.312
Clarendon	919.054	⊢	+		4.6		175.823		! !	738.631
Colleton	2711.276	L 	0.689		63.577		1900.5			746.51
Darlington	4333.792	' 	362.544	;	22.1	1521.046	35.378		0	2392.724
'Dillon	1640.031	г: I	γ	33	η — — — — — — — — !	,	36.4		η !	1570.631
Dorchester	1192.939	 	+	 !	29	458.114	!		0.11	705.715
Edgefield	99.75	L 	<u> </u>	!	99.75		0]	
Fairfield	71.9	' · 	;	'	;	'	'		;	71.9
Florence	5374.908	r I	ý	,	116.255	763.328	63.303		ή !	4432.022
Georgetown	847.013	+ · !	<u> </u>	 !	1 !	99.04	23.568		! !	724.405
Greenville	108.459	L !	!		11.788	68.706	0.2		! !	27.765
Greenwood	15.908	<u>-</u>	;	'	0.186	9.16	1.2		;	5.362
Hampton	2545.514	r · I	ý	83	45.43	311.2	1586.599		ή ι	519.285
Horry	1823.383	+ !	+	 	568.317	179.053	200.354		21.368	854.291
Jasper	1037.82	L !	<u> </u>	0	14.2	!	660.825		! !	362.795
Kershaw	1098.433	<u>-</u>	;	¦	36.626	517.349			{	544.458
Lancaster	13.1	; '	ý	;	13.1	;	;		i	jj
Lee	735.767	г · !	,	,	7		126.067		, !	609.7
Lexington	3105.474	⊢	+		25.68	455.825	1864.216	318.48	! !	441.274
Marion	1319.913	L 	↓	!	0		24.39		/	1295.523
Marlboro	1636.83	; !	;	;	;	282.297	191.407		;	1163.126
Newberry	67.587	Г — — — — — . I	т — — — — — — — — — !	,	0		47.89		,	19.697
Oconee	43.841	+ · !	+	! !	!				!	43.841
Orangeburg	13132.324	L ! !	5887.156	!	64.383	1130.881	3498.51	1891.2	! !	660.226
Richland	2095.922	; !	\	15.5	32.357	701.29	33.304	981.96	;	331.511
Saluda	13.395	r ·	†	,	,		,		i	13.395
Spartanburg	50.598	⊢	+	 	11.105	13.991			!	25.502
Sumter	7534.898	L !	! !	'	98.78	272.491	1387.87		! !	5775.757
Union	2.659	; !	;	{	;	2.659			;	
Williamsburg	1222.863	 !	, 	;	,	665.904	; - ;		,	556.959
York	173.604	⊢	+		66.09	3.042		13.598	 	90.874
Grand Total:	81454.19	0.884	6261.243	148.129	3371.752	11137.61	17980.52	3225.3	54.008	39274.7
Granu Total:	01734.17	0.00+	0201.243	170.127	2011110	11137.01	11700.34	3443.3	27.000	37414.1

 $Blank = None \ Reported$

Appendix B: Surface and Groundwater Use Summary by County in South Carolina, 2006

The following tables list reported surface water and groundwater withdrawals for the 2006 calendar year by county. Water usage data are shown by water use category, and in the case of power generation, include surface water use that is typically considered non-consumptive. As presented throughout this report, all water use figures presented are in millions of gallons.

Abbeville County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	NR
Industrial:	NR	Hydroelectric:	15,807.00
Irrigation:	NR	Industrial:	NR
Mining:	NR	Irrigation:	NR
Water Supply:	3.19	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	3.19	Water Supply:	969.91
		Total:	16,776.91

Aiken County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	15.33	Golf Course:	225.686
Industrial:	1,110.99	Hydroelectric:	NR
Irrigation:	233.66	Industrial:	22,232.03
Mining:	0.00	Irrigation:	4.10
Water Supply:	4959.60	Mining:	NR
Other:	NR	Thermal Power:	56,012.00
Total:	6319.58	Water Supply:	2374.26
		Total:	80 848 08

Allendale County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	NR
Industrial:	850.02	Hydroelectric:	NR
Irrigation:	3,390.42	Industrial:	NR
Mining:	NR	Irrigation:	617.29
Water Supply:	441.75	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	4682.19	Water Supply:	NR
		Total:	617.29

Anderson County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	138.09
Industrial:	NR	Hydroelectric:	118,000.00
Irrigation:	NR	Industrial:	73.17
Mining:	NR	Irrigation:	NR
Water Supply:	NR	Mining:	NR
Other:	NR	Thermal Power:	32,090.71
Total:	NR	Water Supply:	7,906.99
		Total:	158,208.96

Bamberg County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	NR
Industrial:	NR	Hydroelectric:	NR
Irrigation:	378.35	Industrial:	NR
Mining:	NR	Irrigation:	403.96
Water Supply:	515.041	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	893.39	Water Supply:	NR
		Total:	403.96

Barnwell County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	62.75
Industrial:	158.33	Hydroelectric:	NR
Irrigation:	82.17	Industrial:	NR
Mining:	NR	Irrigation:	31.20
Water Supply:	763.27	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	1003.77	Water Supply:	NR
		Total:	93.95

Beaufort County



Groundwater Use		Surface Water Use	
Aquaculture:	12.44	Aquaculture:	47.49
Golf Course:	1,228.67	Golf Course:	1,969.70
Industrial:	92.20	Hydroelectric:	NR
Irrigation:	690.52	Industrial:	NR
Mining:	NR	Irrigation:	25.91
Water Supply:	4,346.91	Mining:	NR
Other:	32.53	Thermal Power:	NR
Total:	6403.27	Water Supply:	8,072.24
		Total:	10,115.34

Berkeley County



incley county			
Groundwater Use		Surface Water Use	
Aquaculture:	4.19	Aquaculture:	67.54
Golf Course:	13.00	Golf Course:	13.00
Industrial:	1,293.15	Hydroelectric:	1,131,435.56
Irrigation:	0.24	Industrial:	3682.251
Mining:	2.98	Irrigation:	1110.14
Water Supply:	186.96	Mining:	NR
Hydroelectric:	0.33	Thermal Power:	188,139.56
Thermal Power:	10.854	Water Supply:	5,656.40
Total:	1,511.704	Total:	1,330,104

Calhoun County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	27.5	Golf Course:	33.1
Industrial:	133	Hydroelectric:	NR
Irrigation:	987.504	Industrial:	28,262.149
Mining:	NR	Irrigation:	72.339
Water Supply:	256.747	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	1,404.751	Water Supply:	NR
		Total:	28.367.59

Charleston County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	2.30
Golf Course:	732.025	Golf Course:	279.807
Industrial:	43.057	Hydroelectric:	NR
Irrigation:	8.885	Industrial:	9,168.09
Mining:	NR	Irrigation:	19.266
Water Supply:	2121.047	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	2,905.014	Water Supply:	30,247.328
		Total:	39,716.79

Cherokee County



er once county				
Groundwater Use		Surface Water Use		•
Aquaculture:	NR	Aquaculture:	NR	
Golf Course:	NR	Golf Course:	NR	
Industrial:	NR	Hydroelectric:	246,549	
Irrigation:	NR	Industrial:	620.524	
Mining:	NR	Irrigation:	NR	
Water Supply:	NR	Mining:	NR	
Thermal Power	NR	Thermal Power:	NR	
Total:	NR	Water Supply:	2581.6	
		Total:	249,751.1	

Chester County



•			
Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	31.9	Golf Course:	11.5
Industrial:	1.484	Hydroelectric:	1,617,728
Irrigation:	NR	Industrial:	99.643
Mining:	NR	Irrigation:	NR
Water Supply:	NR	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	33.384	Water Supply:	1088.79
		Total:	1,618,928



Chesterfield County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	82.781
Industrial:	NR	Hydroelectric:	NR
Irrigation:	350.975	Industrial:	NR
Mining:	16.77	Irrigation:	6.039
Water Supply:	956.312	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	1,324.057	Water Supply:	737.295
		Total:	826.115

Clarendon County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	4.6	Golf Course:	52.42
Industrial:	NR	Hydroelectric:	NR
Irrigation:	175.823	Industrial:	NR
Mining:	NR	Irrigation:	50.705
Water Supply:	738.631	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	919.054	Water Supply:	NR
		Total:	103.125

Colleton County



	- J		
Groundwate	er Use	Surface Water Use	•
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	63.577	Golf Course:	1.264
Industrial:	NR	Hydroelectric:	NR
Irrigation:	1,900.5	Industrial:	NR
Mining:	NR	Irrigation:	790
Water Supply	746.51	Mining:	3.136
Thermal Pow	ver 0.689	Thermal Power:	2,313.264
Other:	NR	Water Supply:	NR
Total:	2,711.276	Total:	3,107.664

Darlington County



armigion county			
Groundwater Use		Surface Water Use	_
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	22.1	Golf Course:	118.5
Industrial:	1521.046	Hydroelectric:	NR
Irrigation:	35.378	Industrial:	7,190.234
Mining:	NR	Irrigation:	127.587
Nuclear Power:	362.544	Mining:	NR
Water Supply:	2392.724	Nuclear Power:	296,062
Other:	0	Water Supply:	NR
Total:	4,333.792	Total:	303,498.3





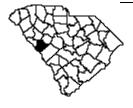
Groundwater Use		Surface Water Use	
Aquaculture:	33	Aquaculture:	NR
Golf Course:	NR	Golf Course:	NR
Industrial:	NR	Hydroelectric:	NR
Irrigation:	36.4	Industrial:	NR
Mining:	NR	Irrigation:	NR
Water Supply:	1,570.631	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	1,640.031	Water Supply:	NR
		Total:	NR

Dorchester County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	29	Golf Course:	NR
Industrial:	458.114	Hydroelectric:	NR
Irrigation:	NR	Industrial:	NR
Mining:	NR	Irrigation:	NR
Water Supply:	705.715	Mining:	NR
Other:	.11	Thermal Power:	NR
Total:	1,192.939	Water Supply:	NR
		Total:	NR

Edgefield County



0			
Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	99.75	Golf Course:	37.5
Industrial:	NR	Hydroelectric:	939,325.52
Irrigation:	NR	Industrial:	NR
Mining:	NR	Irrigation:	289.55
Water Supply:	NR	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	99.75	Water Supply:	1,652.452
		Total:	941 305

Fairfield County



	Surface Water Use	
NR	Aquaculture:	NR
NR	Golf Course:	NR
NR	Hydroelectric:	2,518,500.12
NR	Industrial:	NR
NR	Irrigation:	NR
71.9	Mining:	NR
NR	Nuclear Power:	271,236.322
71.9	Water Supply:	722.306
	Total:	2,790,458.75
	NR NR NR NR 71.9 NR	NR Aquaculture: NR Golf Course: NR Hydroelectric: NR Industrial: NR Irrigation: 71.9 Mining: NR Nuclear Power: 71.9 Water Supply:



Florence County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	116.255	Golf Course:	36.822
Industrial:	763.328	Hydroelectric:	NR
Irrigation:	63.303	Industrial:	7,988.89
Mining:	NR	Irrigation:	0
Water Supply:	4,432.022	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	5,374.908	Water Supply:	1,343.48
		Total:	9.369.192

Georgetown County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	1082.865
Industrial:	99.04	Hydroelectric:	NR
Irrigation:	23.568	Industrial:	12,574.901
Mining:	NR	Irrigation:	3,608.627
Water Supply:	724.405	Mining:	NR
Other:	NR	Thermal Power:	4,715.247
Total:	847.013	Water Supply:	2,320.782
		Total:	24.302.42

Greenville County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	11.788	Golf Course:	194.243
Industrial:	68.706	Hydroelectric:	92,268
Irrigation:	0.2	Industrial:	NR
Mining:	NR	Irrigation:	30.82
Water Supply:	27.765	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	108.459	Water Supply:	25,194.5
		Total:	117.687.6

Greenwood County



cenwood county			
Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	0.186	Golf Course:	58.465
Industrial:	9.16	Hydroelectric:	93433
Irrigation:	1.2	Industrial:	36.9
Mining:	NR	Irrigation:	NR
Water Supply:	5.362	Mining:	NR
Other:	NR	Thermal Power:	56000
Total:	15.908	Water Supply:	4,238.023
		Total [.]	153,766,4





Groundwater Use		Surface Water Use	
Aquaculture:	83	Aquaculture:	NR
Golf Course:	45.43	Golf Course:	NR
Industrial:	311.2	Hydroelectric:	NR
Irrigation:	1586.599	Industrial:	NR
Mining:	NR	Irrigation:	34.5
Water Supply:	519.285	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	2,545.514	Water Supply:	NR
		Total:	34.5

Horry County



•			
Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	568.317	Golf Course:	2733.038
Industrial:	179.053	Hydroelectric:	NR
Irrigation:	200.354	Industrial:	8.23
Mining:	NR	Irrigation:	67.554
Water Supply:	854.291	Mining:	103.6
Other:	21.368	Thermal Power:	44499.4
Total:	1,823.383	Water Supply:	15868.7
		Total:	63,280.52

Jasper County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	14.2	Golf Course:	NR
Industrial:	NR	Hydroelectric:	NR
Irrigation:	660.825	Industrial:	NR
Mining:	NR	Irrigation:	NR
Water Supply:	362.795	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	1037.82	Water Supply:	NR
		Total:	NR

Kershaw County



NR
NR
56.4
923,086
824.944
NR
NR
NR
1835.431
925,802.8

Lancaster County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	13.1	Golf Course:	3.67
Industrial:	NR	Hydroelectric:	1,204,198.00
Irrigation:	NR	Industrial:	1,756
Mining:	NR	Irrigation:	NR
Water Supply:	NR	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	13.1	Water Supply:	7964.4

Total: 1,213,922.07

Laurens County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	48.57
Industrial:	NR	Hydroelectric:	0
Irrigation:	NR	Industrial:	NR
Mining:	NR	Irrigation:	NR
Water Supply:	NR	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	NR	Water Supply:	1748.686
		Total:	1,797.256

Lee County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	NR
Industrial:	NR	Hydroelectric:	NR
Irrigation:	126.067	Industrial:	NR
Mining:	NR	Irrigation:	7.28
Water Supply:	609.7	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	735.767	Water Supply:	NR
		Total:	7.28

Lexington County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	167.116	Golf Course:	173.59
Industrial:	455.825	Hydroelectric:	149,243.6
Irrigation:	1,864.216	Industrial:	9,482.331
Mining:	318.479	Irrigation:	530.749
Water Supply:	441.274	Mining:	391.707
Other:	NR	Thermal Power:	50,963.92
Total:	3,246.91	Water Supply:	5,640.81
		Total:	216,426.7

Marion County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	48.546
Industrial:	NR	Hydroelectric:	NR
Irrigation:	24.39	Industrial:	NR
Mining:	NR	Irrigation:	5
Water Supply:	1,295.523	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	1,319.913	Water Supply:	NR
		Total:	53.546

Marlboro County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	NR
Industrial:	282.297	Hydroelectric:	NR
Irrigation:	191.407	Industrial:	7,176.483
Mining:	NR	Irrigation:	87.993
Water Supply:	1163.126	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	1,636.83	Water Supply:	392.75
		Total::	7,657.226

McCormick County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	36.351
Industrial:	NR	Hydroelectric:	NR
Irrigation:	NR	Industrial:	NR
Mining:	NR	Irrigation:	NR
Water Supply:	NR	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	NR	Water Supply:	445.135
		Total:	481 486

Newberry County



cwocity County			
Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	0	Golf Course:	0.084
Industrial:	NR	Hydroelectric:	NR
Irrigation:	47.89	Industrial:	NR
Mining:	NR	Irrigation:	135.316
Water Supply:	19.697	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	67.587	Water Supply:	1,903.844
		Total:	2,039.244

Oconee County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	114.565
Industrial:	NR	Hydroelectric:	9800
Irrigation:	NR	Industrial:	510.168
Mining:	NR	Irrigation:	279.76
Water Supply:	43.841	Mining:	NR
Other:	NR	Nuclear Power:	2332136
Total:	43.841	Water Supply:	3887.078
		Total:	2.346.728

Orangeburg County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	64.383	Golf Course:	147.198
Industrial:	1,130.881	Hydroelectric:	12,700.00
Irrigation:	3,498.51	Industrial:	166.994
Mining:	1,891.168	Irrigation:	1,634.881
Thermal Power:	5,887.156	Mining:	NR
Water Supply:	660.226	Thermal Power:	NR
Other:	NR	Water Supply:	3,484.8
Total:	13,132.32	Total:	18,133.87

Pickens County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	317.592
Industrial:	NR	Hydroelectric:	2324587
Irrigation:	NR	Industrial:	2526.624
Mining:	NR	Irrigation:	NR
Water Supply:	NR	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	NR	Water Supply:	3998.539
		Total:	2,331,430

Richland County



	Surface Water Use	_
15.5	Aquaculture:	21.8
32.357	Golf Course:	374.326
701.29	Hydroelectric:	350,770.49
33.304	Industrial:	10,597.317
981.96	Irrigation:	0.8
331.511	Mining:	NR
NR	Thermal Power:	146348.5
2,095.922	Water Supply:	22910.18
	Total:	531,023.4
	32.357 701.29 33.304 981.96 331.511 NR	15.5 Aquaculture: 32.357 Golf Course: 701.29 Hydroelectric: 33.304 Industrial: 981.96 Irrigation: 331.511 Mining: NR Thermal Power: 2,095.922 Water Supply:

Saluda County



3			
Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	NR
Industrial:	NR	Hydroelectric:	NR
Irrigation:	NR	Industrial:	NR
Mining:	NR	Irrigation:	599.8
Water Supply:	13.395	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	13.395	Water Supply:	NR
		Total:	599.8

Spartanburg County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	35.04
Golf Course:	11.105	Golf Course:	416.197
Industrial:	13.991	Hydroelectric:	11852.29
Irrigation:	NR	Industrial:	NR
Mining:	NR	Irrigation:	107.66
Water Supply:	25.502	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	50.598	Water Supply:	14725.447
		Other:	27 136 63

Sumter County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	98.78	Golf Course:	252.228
Industrial:	272.491	Hydroelectric:	NR
Irrigation:	1387.87	Industrial:	NR
Mining:	NR	Irrigation:	553.682
Water Supply:	5,775.757	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	7,534.898	Water Supply:	NR
		Total:	805.91

Union County



	Surface Water Use	_
NR	Aquaculture:	NR
NR	Golf Course:	7.2
2.659	Hydroelectric:	327,175.228
NR	Industrial:	458
NR	Irrigation:	NR
NR	Mining:	NR
NR	Thermal Power:	NR
2.659	Water Supply:	1,259.814
	Total:	328,900.2
	NR 2.659 NR NR NR NR	NR Aquaculture: NR Golf Course: 2.659 Hydroelectric: NR Industrial: NR Irrigation: NR Mining: NR Thermal Power: 2.659 Water Supply:

Williamsburg County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	NR
Industrial:	665.904	Hydroelectric:	NR
Irrigation:	NR	Industrial:	NR
Mining:	NR	Irrigation:	NR
Water Supply:	556.959	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	1,222.863	Water Supply:	NR
		Total:	NR

York County



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Groundwater Use	_	Surface Water Use	_
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	66.09	Golf Course:	153.576
Industrial:	3.042	Hydroelectric:	679938
Irrigation:	NR	Industrial:	12752.2
Mining:	13.598	Irrigation:	2.67
Water Supply:	90.874	Mining:	NR
Other:	NR	Nuclear Power:	83439
Total:	173.604	Water Supply:	5945.135
		Total:	782,230.6

Appendix C: Population by County

Population and Projections by County

County	2000	2005	2010	2015	2020	2025
Abbeville	26,167	26,740	27,610	28,480	29,350	30,210
Aiken	142,552	153,900	163,950	174,000	184,060	194,110
Allendale	11,211	11,820	11,960	12,110	12,260	12,400
Anderson	165,740	172,120	180,280	188,440	196,590	204,750
Bamberg	16,658	16,130	15,740	15,340	14,950	14,560
Barnwell	23,478	24,350	25,390	26,440	27,490	28,540
Beaufort	120,937	132,760	146,440	160,110	173,790	187,460
Berkeley	142,651	156,610	167,520	178,420	189,330	200,230
Calhoun	15,185	15,570	16,350	17,130	17,910	18,690
Charleston	309,969	320,080	328,570	337,070	345,560	354,060
Cherokee	52,537	54,770	57,860	60,960	64,050	67,140
Chester	34,068	34,630	35,500	36,370	37,240	38,110
Chesterfield	42,768	43,100	44,310	45,520	46,730	47,940
Clarendon	32,502	33,300	34,650	35,990	37,330	38,680
Colleton	38,264	39,910	41,590	43,260	44,940	46,610
Darlington	67,394	67,910	69,260	70,610	71,960	73,310
Dillon	30,722	30,220	30,280	30,340	30,400	30,460
Dorchester	96,413	106,590	115,430	124,280	133,130	141,980
Edgefield	24,595	25,490	27,400	29,320	31,230	33,150
Fairfield	23,454	24,260	25,010	25,770	26,520	27,280
Florence	125,761	130,140	134,510	138,870	143,230	147,590
Georgetown	55,797	58,300	61,770	65,240	68,710	72,190
Greenville	379,616	397,580	421,210	444,840	468,470	492,100
Greenwood	66,271	68,590	71,170	73,750	76,330	78,910
Hampton	21,386	21,810	22,690	23,570	24,450	25,330
} <u>-</u>	196,629	215,850	239,020	262,190	285,360	308,530
Horry	20,678	21,390	23,000	24,610	26,220	27,830
Jasper Kershaw	52,647	55,300	58,880	62,460	66,040	69,620
	61,351	!	63,940		67,950	69,950
Lancaster	69,567	61,940 72,800	77,190	65,950 81,580	85,960	90,350
Laurens		!	+	<u> </u>		
Lee	20,119	20,540	21,010	21,480	21,960	22,430
Lexington	216,014	233,060	252,580	272,090	291,600	311,120
McCormick	9,958	10,670	11,290	11,910	12,530	13,150
Marion	35,466	35,930	36,390	36,840	37,300	37,760
Marlboro	28,818	28,100	27,460	26,820	26,170	25,530
Newberry	36,108	37,270	38,530	39,790	41,050	42,320
Oconee	66,215	70,910	75,470	80,040	84,600	89,160
Orangeburg	91,582	94,260	96,890	99,510	102,140	104,770
Pickens	110,757	119,040	127,110	135,190	143,260	151,330
Richland	320,677	331,810	345,660	359,520	373,370	387,220
Saluda	19,181	19,400	20,090	20,790	21,480	22,180
Spartanburg	253,791	267,390	280,590	293,790	306,990	320,190
Sumter	104,646	112,030	116,100	120,180	124,260	128,330
Union	29,881	29,720	29,480	29,240	29,010	28,770
Williamsburg	37,217	36,960	36,820	36,680	36,540	36,400
York	164,614	177,420	192,290	207,160	222,030	236,900
South Carolina:	4,012,012	4,218,460	4,446,240	4,674,050	4,901,810	5,129,630